

REMARKS

Claims 1, 2, 4, 5, 8, 9, 24, 25, 30, 31, 34, 35, 37-40 and 43 are pending and are rejected. Claims 1, 24, 30, and 34 are objected to. Claims 3, 6, 7, 10-23, 26-29, 32, 33, 36, 41, 42, and 44-63 are canceled.

Applicant has amended claims 1, 24, 31, and 38 and has canceled claims 4, 5, 8, 9, 25, 30, 34, 35, 37, 39, 40, and 43 without prejudice.

New claims 64 and 65 are added; the new claims are pending claims 1 and 2 with additional administration limitations, supported at least on p. 15 line 19 to p. 16 line 9; p. 16 lines 16-21; p. 21 lines 3-7; p. 22 lines 5-7; and U.S. Patent No. 5,981,256, incorporated by reference in its entirety, at column 18 lines 17-19. Applicant respectfully asserts that no new matter is introduced.

Applicant thanks the Examiner and the Supervisory Primary Examiner for the personal interview on January 9, 2007 with Applicant's undersigned representative. As required, Applicant states that the substance of the interview was a discussion of the pending claims and pending references.

Applicant respectfully requests consideration of the following arguments.

CLAIM OBJECTIONS

Claims 1, 8, 24, 30, and 34 are objected to because of informalities. Applicant disagrees, but to expedite prosecution has replaced “% w/v” with “% w/v” in each of claims 1 and 24, as requested, and has canceled claims 8, 30, and 34, to address the objection.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claim 40 is rejected under 35 U.S.C. §112 ¶2 as indefinite. Claim 40 is now canceled, rendering this rejection moot.

CLAIM REJECTIONS 35 U.S.C. §103

Claims 34, 35, and 37-40 are rejected under 35 U.S.C. §103(a) as obvious over SU 1685448.

Claims 34, 35, 37, 39, and 40 are canceled. Claim 38 is amended to depend from claim 1. Applicant believes that this overcomes the rejection and respectfully requests its withdrawal.

Claims 1-2, 4-5, 8-9, 24-25, 30-31, 34-40, and 43 are rejected under 35 U.S.C. §103(a) as obvious over SU 1685448 in view of Zaias, Rawlings, and Burbach. Applicant respectfully disagrees.

Claims 34, 35, 37, 39, and 40 are canceled. Claim 38 is amended to depend from claim 1, which recites a formulation consisting essentially of trypsin.

The Examiner's position is that one skilled in the art would administer a composition containing trypsin but eliminating DMSO because, as stated in Zaias, DMSO causes skin irritation, redness, itching, and scaling.

Applicant disagrees that the three secondary references support the primary reference to render Applicant's method obvious, as subsequently analyzed.

SU 1685448 does not teach, suggest, or motivate application of a composition consisting essentially of trypsin. As stated by the Examiner, Zaias teaches that DMSO causes skin irritation, redness, itching, and scaling, but this is in a composition comprising liposomes and melanin, without enzymes. Stated differently, there is no teaching in Zaias of using enzymes in a composition where it is desirable to eliminate DMSO. As supported by evidence submitted in Applicant's August 15, 2005 Declaration, DMSO affects enzyme activity. Thus, there is no teaching, motivation, or suggestion to combine SU 1685448 and Zaias to disclose Applicant's enzyme composition.

Rawlings teaches a stratum corneum trypsin-like enzyme (SCTE) with molecular weights of 24 kDa, 26 kDa and 27 kDa (column 2 lines 8-13). This does not teach, motivate, or suggest use of trypsin to achieve Applicant's method, or Applicant's treatment of seborrheic keratosis. Rawlings is silent on any relationship of its SCTE to trypsin: it does not teach whether the three different molecular weights represent three proteins each with SCTE activity, or whether there is one protein having three subunits, or whether one, two, or all three molecular weight entities are needed for activation, etc. Rawling's method uses his SCTE for "alleviation or prevention of dry flaky skin conditions" (Abstract) ... "which are characterized by hyperkeratinisation, decreased rate of desquamation or abnormal desmosomal formation" (column 9, lines 26-29), not for treating seborrheic keratosis.

It is the Examiner's position that the "disclosure of Burbach indicates the effect on human skin of proteases, and specifically trypsin, in varying amount." The trypsin concentrations of the injected solutions were, however, 0.1% to 0.5%. Applicant's method uses concentrations of $1 \times 10^{-5}\%$ w/v to about $1 \times 10^{-3}\%$ w/v and from about 1% w/v to about 10% w/v. Burbach teaches use of trypsin to form blisters, not to treat or remove a seborrheic keratosis. Thus, Burbach teaches away from Applicant's method.

Applicant's method is directed to removing a seborrheic keratosis condition. The attached Declaration under 35 U.S.C. §1.132 describes how the claimed invention treats seborrheic keratosis.

For at least these reasons, Applicant asserts that the primary reference alone fails, that the primary reference in combination with the secondary references fail, and that there is no teaching, suggestion, or motivation to combine with secondary references with SU 1685448. Applicant thus respectfully requests that the rejection be withdrawn.

Claims 1-2, 4, 8, 24, 30-31, 34, 35, 37, 40, and 43 are rejected under 35 U.S.C. §103(a) as obvious over Klein or Fortney. Applicant respectfully disagrees.

Applicant has canceled claims 4, 8, 30, 34, 35, 37, 40, and 43. With respect to claims 1-2, 24, and 31, Applicant respectfully disagrees.

It is the Examiner's position that the enzyme product of Klein is "considered to consist essentially of hydrolytic enzymes (hydrolases)."

Klein is directed to a pineapple bromelain enzyme that is used to debride burnt skin (column 4 line 39 to column 7 line 17). Klein does not teach, suggest, or motivate use of trypsin to treat seborrheic keratosis, at least because of the differences in pathology between a neoplasm (seborrheic keratosis) and burnt skin.

It is the Examiner's position that the topically administered composition of Fortney is considered to consist essentially of protease as the composition includes a topical carrier (column 2, lines 33-36) which clearly does not materially affect the basic and novel characteristics of the claimed invention." Applicant respectfully disagrees.

Fortney discloses a "pharmaceutically acceptable topical carrier admixed with an effective amount of a protease." Fortney's protease is an extracellular neutral protease from *Vibrio proteolyticus*. Applicant respectfully asserts that such a carrier may contain an agent that affects an enzyme's activity, such as DMSO, as previously analyzed. In addition, Fortney's method is directed to wound debridement (column 2 line 66 to column 3, line 9). Fortney does not teach, suggest, or motivate treating seborrheic keratosis, at least because of the differences in pathology between a neoplasm (seborrheic keratosis) and wounded skin.

Further, although Klein and Fortney do not teach the trypsin concentration recited in claims 1, 24, 30, and 34, the Examiner states "the selection of a specific suitable concentration, including that claimed, clearly would have been an obvious matter of optimization on the part of the artisan of ordinary skill in the art." Applicant's method provides for selective removal of seborrheic keratosis; the attached Declaration explains how efficacy is achieved in view of the underlying pathology.

For at least these reasons Applicant respectfully asserts the rejection is overcome and respectfully request its withdrawal.

CONCLUSION

Applicants do not believe any other fees are due in connection with filing this response other than a fee of \$60.00 for a one month extension of time, up to and including January 29, 2007, as set forth in 37 C.F.R. §1.136(a). The Examiner is authorized additional fees to Deposit Account No. 23-3000.

The Examiner is invited to contact Applicant's undersigned representative with questions.

Respectfully submitted,

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